

REMARKS

Claims 42-77 are pending in the present application.

Applicants wish to thank Examiner Tentoni for the helpful and courteous discussion with their undersigned Representative on April 9, 2010. During this discussion, various arguments (including those presented herein) were discussed. The content of this discussion is believed to be accurately reflected by the amendments and comments presented herein. Reconsideration of the outstanding rejections is requested in view of the amendments and remarks herein.

The rejections of: (a) Claims 42-60, 76, and 77 under 35 U.S.C. §102(a) over Monsheimer et al (US 2004/0137228), (b) Claims 42-60, 76, and 77 under 35 U.S.C. §102(e) over Monsheimer et al (US 2004/0137228), and (c) Claims 42-60, 76, and 77 under 35 U.S.C. §103(a) over Monsheimer et al (US 2004/0137228), are respectfully traversed.

The claimed invention is drawn to a process for producing moldings by a layer-by-layer process, comprising selectively melting regions of a respective pulverulent layer via unfocused introduction of electromagnetic energy, using a polymer powder, wherein the powder comprises at least one thermoplastic random copolymer with an ISO 1133 MFR value of from 12 to 1 g/10 min. (see Claim 42)

The Examiner rejects the claims over Monsheimer et al alleging that this reference discloses the claimed process. Although the Examiner recognizes that Monsheimer et al fails to disclose or suggest the claimed ISO 1133 MFR value range, the Examiner alleges that this range would be inherent in the process of Monsheimer et al “principally because Monsheimer

et al teaches the use of VESTAMELT® polymers, which are also described as being used by the instant specification in the instant process.”

Applicants disagree with the Examiner for a number of reasons. First, the Examiner is reminded that inherency is based on certainties, not probabilities. Applicants direct the Examiner’s attention to MPEP §2112, which states:

“In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.” *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)

The Examiner has provided insufficient basis in fact and/or technical reasoning to support a determination of inherency. Indeed, the fact that Monsheimer et al fails to disclose or suggest the claimed ISO 1133 MFR value range is an important distinction between the claimed invention and the disclosure of Monsheimer et al.

The difference between the claimed invention and the disclosure of Monsheimer et al is, in fact, that the powder of the present invention comprises at least one thermoplastic random copolymer with an ISO 1133 MFR value of from 12 to 1 g/10 min. It is true that Vestamelt is disclosed in paragraph [0049] of Monsheimer et al; however, in Monsheimer et al the Vestamelt utilized include Vestamelt X 1310, 4481 and 840. As evidenced by the product information **submitted herewith**, Vestamelt X 1310, 4481 and 840 have MFR values of 110, 16 and 40 respectively. Thus, the Vestamelt used in Monsheimer et al do not inherently fall within the claimed ISO 1133 MFR value range.

The foregoing distinction is important for at least an addition reason. The present inventors found that the polymers – having distinctly lower MFR values – used in the present application are very much more advantageous. At higher MFR values, the reproducibility of the build-up process becomes much poorer. In particular, adhesion of powder particles to the

applicator device, such as a roller or doctor blade, can be expected after melting of the zones scheduled for such build-up in some successive layers. Monsheimer et al fails to disclose, suggest, or even realize such a problem exists, much less appreciate that using polymers having the claimed ISO 1133 MFR value range could provide such significant benefits.

The Supreme Court has held that the discovery of a problem or a cause of a problem can lend patentability to an invention. The discovery of a problem is often the key to making a patentable invention. Thus, the patentability of an invention under 35 U.S.C. §103 must be evaluated against the background of the highly developed and specific art to which it relates, and this background includes an understanding of those unsolved problems persisting in the art solved by the invention. *See, Eibel Process Co. v. Minnesota & Ontario Paper Co.*, 261 U.S. 45, 43 S.Ct. 322, 67 L.Ed. 523 (1923).

Moreover, the Examiner is directed to Table 1 on page 23 of the present application where the benefits of the claimed invention is illustrated by Examples 2-8 (the powder comprises at least one thermoplastic random copolymer with an ISO 1133 MFR value of from 12 to 1 g/10 min) as compared to Example 1 with reprecipitation of nylon-12 (PA 12), which is also listed in paragraph [0049] and Table 1 of Monsheimer et al as a preferred pulverulent material for use in the method described therein. Accordingly, Applicants submit that these data rebut even a *prima facie* case of obviousness.

As such, Applicants request withdrawal of these grounds of rejection.

Applicants submit that the present application is in condition for allowance. Early notification to this effect is respectfully requested.

Respectfully submitted,

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